ABSTRACT

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A STUDY ON THE EFFECTS OF HOME HEALTH CARE ON HOSPITAL READMISSIONS FOR ELDERLY PATIENTS WITH CONGESTIVE HEART FAILURE

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The overall objective of this study was to investigate whether an increase in the amount of home health care services will have an impact on the readmission rate among elderly patients who are diagnosed with Congestive Heart Failure. To attain this objective, the following areas of home health care were addressed by the researcher: (a) identification of home care services provided and (b) effectiveness of home care on the elderly with congestive heart failure. Content Analysis design was used in the study. A sample of 40 patients were used for the study. A sample of patients with the primary diagnoses of congestive heart failure were selected for the study. Discharge Plans were documented, patients were followed to determine the extent to which the expected or arranged care was followed.

The study was an attempt to demonstrate that the proper use of home care services will prove to be effective against hospital readmissions among those elderly patients with congestive heart failure and who are at risk for long term hospitalization.

# A STUDY ON THE EFFECTS OF HOME HEALTH CARE ON HOSPITAL READMISSIONS FOR ELDERLY PATIENTS WITH CONGESTIVE HEART FAILURE

A THESIS

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# CHAPTER 1

## INTRODUCTION

Managed Care has become an integral part of the U.S health care system. Since the introduction of Capitation, Health Maintenance Organizations (HMO), Preferred Providers (PPO) and Independent Practice Associations (IPA), health care providers have a new found incentive to find a more cost effective approach to health care. This change has also forced hospital administrators to take a closer look at rising health care costs associated with hospitalizations.

Elderly patients with chronic illnesses like Congestive Heart Failure are at increased risk for early rehospitalization with rates ranging from 29 to 47 percent within three to six months of initial discharge. [1] Research indicates that elderly and disabled patients tend to have higher rates of readmission. These readmissions are more likely to be associated with chronic medical illnesses like Congestive Heart Failure, Diabetes, or Hypertension. These elderly patients must often deal with diminished physical and mental capacities, serious illness, financial stressors, difficulties in obtaining community resources, dependency on family members who may or may not be prepared to cope with care giving, and a loss of sense of control over their own life.[2] For an elderly patient, going home from the hospital with only a few of these stressors can place a patient at risk for readmission in

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[1]Michael Rich, "Early Readmissions of Elderly with Congestive Heart Failure," Journal of American Geriatric Society 38, (May 1990) : 1290-5.

[2]C. Steven and A. Monk, "Discharge Planning: Impact of Medicare Prospective Payment on Elderly Patients," Journal of Gerontological Society 38, (May 1990) : 1292.

a short time.

As part of continuing efforts to contain rising costs, emphasis has been placed on discharge planning at the initial stage of hospitalization and for unplanned readmissions as well. There appears to be failure on the part of Social Services to address the needs of patients during initial admission. It seems that social workers have become consumed with Diagnostic Related Groups (DRGs), thus affecting the whole discharge planning process. The advent of DRGs and the financial penalties associated with its policy has brought with it increasing pressure to discharge patients quickly. Often the practice makes it difficult for discharge planners to engage in any type of preparation for post-hospitalization. The end result is that many patients return home and because limited time was spent on their discharge plan, the patient is at high risk for unplanned readmission. Consequently, patients must begin to consider alternative post discharge plans while still adapting to the impact of their illness or impairment.[3] With effective case management and family participation in discharge planning and after care, the transition to home could prove to be successful.

The importance of effective discharge planning has been amply demonstrated by past research, including its importance in reducing hospital length of stay; its impact on readmissions; and its importance to the elderly.[4] The main focus of discharge planning has

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[3]S. Blumenfield and G. Rosberg, "Towards a Network of Social Health Services: Redefining Discharge Planning and Expanding the Social Work Domain," Social Work in Health Care 13, (1988) : 24-34.

[4]E.P. Cable and S.P. Mayers, " Discharge Planning Effects on Lengths of Hospital Stay," Archives of Physical Medicare and Rehabilitation 64, (1983) : 57-60.

always been geared toward ensuring quality of patient care and maintaining viability. Hospitals are now wanting to increase the effectiveness of their discharge planning process. Social Workers and Case Managers are turning to Home Health Care as a tool to help with the battle of reducing hospital costs. Although home care is not new to health care, it has proven to be beneficial in decreasing readmissions.

While home care is not a replacement for all hospital care, it has become an important setting for delivery of preventative, diagnostic, therapeutic, rehabilitative and long-term maintenance services. The care rendered in a patient's home should cost less than similar care provided in a hospital setting or nursing home.

For decades, home health care meant visiting nurses, physical therapists, home aides, assisted transportation, meals on wheels, and to a lesser extent hospice programs. In the past few years care provided in the home has become increasingly high tech, including intravenous infusions, parental nutrition, supplemental oxygen and even respirators. These new technological advances will enable treatment of patients with chronic illnesses in home settings as well as increase potential for case managers to discharge patients without delay. The move from institutionalized to deinstitutionalized patients will depend heavily on the success of the social worker's ability to be resourceful in coming up with an after care plan that will provide quality care. This approach will have to include linking the family with home care services requiring them to play an active role in care of these elderly patients.

## Statement of the Problem

Home health services was originally designed to decrease hospital lengths of stay and offer quality of life to the elderly. It is important that the relationship between home health services and the elderly be re-evaluated with focus on its effectiveness among the elderly who are diagnosed with Congestive Heart Failure since they tend to require more medical attention and have great potential for hospital readmission.

In literature, insufficient attention has been given to the amount of home health services the patient received post hospitalization. The present system functions well but attention needs to be paid to the amount of services provided. The system needs to be re-modeled in order to respond better to the needs of the elderly. So many times elderly patients are discharged home with inadequate services. Poor compliance, nutritional diet, lack of informal care (family support), and limited visits with medical physician all contribute to their decomposition. If caseworkers fail to identify these needs the end result will involve numerous hospital readmissions. Excluding the patient and or family members from the discharge planning process also leaves room for insufficient plans. Failure to do so will limit the amount of information that could be utilized to help develop a plan that would be beneficial for the patient. If a reduction in rates is to occur, a better approach to aftercare must be obtained.

## Purpose of the Study

The purpose of this study is to examine the effects of Home Health Services on hospital readmissions among the elderly diagnosed with Congestive Heart Failure (CHF). More specifically, the study will determine if providing more home health services will

yield a reduction in the number of hospital readmissions among the elderly who are admitted with CHF. Evidence will indicate that in home support will improve quality of life while decreasing failure rates, and provide a more cost effective health care industry.

# CHAPTER 2

## LITERATURE REVIEW

Since the growth of managed care and the advent of Diagnostic-Related Groups (DRGs), the health care industry has set its sights on decreasing the number of hospital readmissions. These changes have placed the frail elderly under the microscope to be scrutinized. The literature has shown that this population requires the most medical attention and are at risk for having a high readmission rate.[1] For 25 years and more, research has revealed problems surrounding the discharge of patients from hospitals, particularly those who are elderly. It has been suggested that high rising readmission rates may well be "the price of early discharge".[2]

The propensity towards earlier discharges from hospitals may bring about repercussions. It has been suggested that rising readmission rates may well be the price of early discharges. In a study conducted by Alison Tierney, elderly patients (aged 75 years and over) were admitted to medical and surgical wards of an acute hospital (mean length of stay 11.7 days), the study found a readmission rate of 27.7% within 3 months of discharge home. Almost 20% of the first readmission had occurred within 2 weeks of discharge from hospital. High readmission rates among elderly patients, and recurrent readmission, have been reported over considerable time. Despite this, the phenomenon of

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[1]B. Berkman and R. Abrams, "Factors Related to Hospital Readmissions of Elderly Cardiac Patients," Social Work 31, (1986) : 99-103.

[2]A.J. Tierney and S.J. Closs, "Discharge Planning for Elderly Patients," Nursing Standard 7, (1993) : 30-3.

readmission of elderly remains ill defined, inadequately documented and apparently poorly understood. Better data and a clear understanding of factors associated with readmission rates are essential, especially if readmission rates are to be used sensibly as an indicator in terms of efficiency and effectiveness.[3] Tierney's study failed to look closely at how readmissions could have been prevented, if the use of some form of intervention was implemented or if services that were provided were enough to meet the needs of the patients in the study.

Individuals aged 65 and older represent more than 31 million Americans, or 1 of 8. The ratio is 10 times larger than their representatives in 1900 and is expected to more than double by 2020. Over the next 10 years the Bureau of the Census estimates that the proportion of elderly will remain virtually constant. Between 2010 and 2030, the baby boomers-those born between 1946 and 1964 will enter the ranks of the elderly.[4] This development will expand the population from 39.7 million in 2010 to 68.8 million in 2030, when more than 20 percent of the population will be 65 and older.[5] Not only is the baby boom generation starting to gray, but more than four of five older people suffer from some type of chronic condition.

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[3]A.J. Tierney, M.S. Macmillan and A. Worth, " Discharge Planning for Elderly People Going Home From Hospital: Experiences of Patients and their Carers," Edinburgh: Nursing Research Unit, The university of Edinburgh: (1993).

[4]Laura Freeman, "Home Sweet Home Health Care", Monthly Labor Review, (March 1995) : 10.

[5]Jennifer Cheeseman Day, "Population Projections of the United States, by Age, Sex, and Hispanic Origin: 1992-2050, " Current Population Reports, Bureau of the Census, (October 1992) : 7.

Managed care will continue to reduce hospital inpatient utilization. More services will be provided in outpatient or subacute settings. Elderly patients with heart failure are at increased risk for early rehospitalization, with rates of readmission ranging from 29 to 47 percent within three to six months of initial discharge.[6] Inpatient hospital days could decrease by as much as 34% by 1999, according to a new study from a health care information industry. Researchers at the Sachs Group, Evanston, Ill, say the decrease in hospital days is the product of a projected 26% decrease in hospital admissions and an 11% decline in the average length of stay, to 5.5 days, during the next 4 years. According to Sach's senior vice president, Ann Mond Johnson "Managed care will continue to reduce hospital inpatient utilization." More services are provided in outpatient or subacute settings, she notes that trends could vary dramatically in different parts of the country.

Overall, the study reports that US hospital's 1.2 million beds will meet with a demands for only 424,000 beds in 1999. The study was based on a model of practice patterns and inpatient utilization of a group model health maintenance organization in California's aggressive managed care market. As health care reform moves toward definitions and parameters of patient outcomes, it is imperative that health care providers understand who is most likely to benefit from home care. Clearly, the old-old elderly are more likely to have problems during the immediate post-hospitalization period.[7] Moreover, behavioral factors, such as non-compliance with medications and diet, and

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[6]J.Gooding and A.M. Jette, "Hospital Readmissions Among the Elderly," Journal of American Geriatrics 33, (1985) : 595-601.

[7]Rebecca Voelker, "Outpatient Trend Continues," Journal of American Medical Association 274, (August, 1995) : 601.

social factors, such as social isolation, frequently contribute to early readmissions, suggesting that many such readmissions could be prevented.[8]

Many elderly individuals lack important services that could help them return to prehospitalization level of functioning. For many it may include returning home and functioning independently with a limited amount of home care services or having weekly homemaker services. Instead, they rely heavily on family members for their care, many of whom may also be elderly. This is especially true for married elderly.[9] The absence of family members accounts for many institutionalization of the elderly, according to the Congressional Special Committee on Aging.[10] Helberg's (1994) study of patients in home health agency found that married patients received fewer home health care visits than unmarried patients. Sending elderly patients home before they are fully recovered and without adequate support may lead to additional health problems and subsequent hospital readmissions.[11] Readmission rates to acute care hospitals and post discharge admission to nursing homes are clearly higher in persons who are frail and elderly.[12]

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[8]J.M. Vinson and M.W. Rich, " Early Readmission of Elderly Patients with Congestive Heart Failure", Journal of American Geriatric Society: (1990): 38: 1290-5.

[9]J.L. Helberg, "Use of Home Nursing Resources by the Elderly," Public Health Nursing 11, (1994) : 104-112.

[10]Robert D. Addleman, "Eldercare: Out of the Institution and into the Community," Health Care Forum Journal, (May 1995) : 60.

[11]L. Branch and A. Jette, "A Prospective Study on Long Term Care Institution among the Aged," American Journal of Public Health 72, (1982) : 1373-79.

[12]M. Weinberger and E. Oddone, "Strategies to Reduce Hospital Readmissions: A Review," Quality Review Bulletin 15, (1989) : 255-60.

The most significant deficiency among caregivers and health care providers is the lack of integrated, coordinated continuum of care with which to address needs of older adults. The fragmented network of eldercare is symptomatic of the piecemeal approach that prevails the entire health care delivery system.[13] Nearly eight to ten disabled people live outside of health care institutions. Of those, 70 percent rely solely on informal caregivers such as spouses and children. A 1993 report from the National Association for Home Care estimates that the current elderly population needing assistance ranges from 9 to 10 million.[14]

Congestive heart failure is the most common indication for hospitalization among adults over 65 years of age,[15] and the rate of admission to treat this condition has increased progressively over the past two decades.[16] Congestive heart failure (CHF) is among the most frequent reasons for hospitalization in adults. Heart failure occurs in 1% of people over 50, 5% of those over 75, and 10% of those over 80. As the "baby boomers" age, we can expect to see the incidence in the United States rise steadily.[17] The

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[13]Robert B. Addleman, "Eldercare: Out of the Institution and into the Community," Health Care Forum Journal, (1995) : 60.

[14]Patricia Braus, "When Mom Needs Help," American Demographics, (March 1994) : 41.

[15]E.J. Graves, "National Center for Health Statistics," Public Health Service, (1991) : 1-12.

[16]J.K. Ghali and R. Cooper, "Trends in Hospitalization Rates for Heart Failure in the United States," Archives of Internal Medicine 150, (1990) : 769-73.

[17]Mark Alexander, "Hospitalization for Congestive Heart Failure," Journal of American Medical Association 274, (October, 1995) : 1037.

most common cause of heart failure is coronary artery disease, though it also occurs in infants, children, and adults who have congenital or acquired cardiac abnormalities. The risk of developing heart failure rises four to six times with a history of Myocardial Infarction (MI). By identifying patients at risk, educating them, and referring them for medical evaluation and treatment or behavioral support, you can help prevent heart failure. Patient teaching and counseling should begin on admission and continue after discharge because understanding and retention improve with repetition. Patients who aren't adequately prepared for discharge or who don't have good community support and follow-up care are soon readmitted for worsening symptoms. In one study, 53 of 148 patients with heart failure who were 65 or older were admitted for recurring symptoms within six months of hospital discharge. And in a study with 161 patients with heart failure who were over the age of 70, 38 were admitted with recurrent symptoms within 90 days of discharge. The following factors were identified as preventable causes of readmission: failed social support systems (21%), inadequate follow-up (20%), failure to seek medical attention promptly when symptoms recurred (20%), noncompliance with diet (18%), noncompliance with drug therapy (15%), and inadequate discharge planning (15%).[18] Many wrongly dismiss the symptoms which include breathlessness, swelling of feet, legs, and ankles and weight gain from fluid retention, fatigue and weakness, persistent coughing and difficulty breathing while sleeping by chalking them up to growing

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[18]Kathleen Dracup, " Rethinking Heart Failure," American Journal of Nursing, (July, 1995) : 24.

older or not being physically fit.[19]

Chronic medical conditions such as asthma, diabetes, and hypertension, are conditions that can often be managed with timely and effective treatment in an outpatient setting, thereby preventing hospitalization. Hospitalization for individuals with chronic medical conditions are likely to indicate an episodic or even potentially permanent decline in health status. Furthermore, the use of inpatient services rather than ambulatory care for managing chronic medical conditions may be more costly. [20] Admission rates for chronic medical conditions have already been included in some health care plan report cards. Public health departments have targeted communities with high preventable hospitalization rates for interventions to improve access to ambulatory care.[21] In a study of 282 CHF patients aged 70 or older, researchers at the Washington University School of Medicine, St. Louis, MO, provided about half with conventional care in addition to comprehensive education about CHF, medication reviews, dietary consultations, and close follow up after hospital discharge. The control group received only conventional care. By using this approach researchers were able to reduce admissions by 44%. CHF now affects some 4 million Americans, about 75% of whom are past age 65. This study is especially important

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[19]Alan Wasserman, "New Guidelines for Heart Failure Treatment," Health, (January, 1995) : 74.

[20]Andrew Bindman, "Preventable Hospitalizations and Access to Health Care,"Journal of American Medical Association 274, (July, 1996) : 305.

[21]P.R. Griswold and J.L. Soelling, "Health Care Costs in Massachusetts,"Boston Massachusetts Rate setting Commission: (1992).

because of the aging US population.[22]

The literature suggests that high and rising readmission rates may well be the "price of early discharge". After hospital discharge, elderly patients frequently encounter stress due to inadequate preparation and teaching regarding what to expect once home. They must adapt to multiple changes and demands on their life while also feeling dependent on others for support at home.[23] Social Workers must be able to target patients during the initial admission who can benefit from follow up services and programs which would facilitate recovery, possibly reducing unplanned readmissions with further need for social work. Predicting patients who will experience early readmission and will again be in need of social work services is critical. Elderly patients who are readmitted are more severely ill than first admission. These readmissions are also more likely to be persons with chronic medical problems.[24] In the United States, patients with certain conditions such as hip fractures, myocardial infarctions, stroke, gastrointestinal bleeding, are almost always hospitalized.[25] Education and counseling may offer a simple, effective method for reducing readmissions and improving quality of life for patients with congestive heart failure.

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[22]Quick Updates, "Simple Route Best for CHF," Journal of American Medical Association 275, (1996) : 584.

[23]Kathryn Dansky, "After Hospitalization, Home Health Care for Elderly persons," Clinical Nursing Research 5, (May, 1996) : 185-98.

[24]G.F. Anderson and E.P. Steinberg, " Predicting Hospital Readmissions in the Medicare Population," Inquiry 22, (1985) : 251-58.

[25]Elliot S. Fisher, " Hospital Readmission Rates for Cohorts of Medicare Beneficiaries in Boston and New Haven," The New England Journal of Medicine 331, (1994) : 989-95.

In this age where all health care facilities are examining reimbursement issues and closely scrutinizing the link between quality, cost and length of stay, Pamela Bean et al found that Lakes Region General Hospital was no exception. Pamela Bean et al studied a 117 bed, acute care community hospital to analyze the rate of unplanned readmissions within 31 days. Initially, the data showed a annual readmission rate of 5.07% to be higher than that of the Maryland Hospital Quality indicator of 3.34%. Of the 147 patients readmitted January through June 1993, 48% were aged 60-80. Forty-seven were for chronic medical care. Only 50% of all patients readmitted had been seen by Social Services prior to discharge, and 76% of these has been discharged home without referral to home health agency or to other community services with visiting nurse involvement. In the cardiac patient population there was an identified need for additional collaboration with other acute care facilities and home health agencies.[26]

Implementation of a perspective payment system (PPS) for Medicare inpatient care, mandated by the Social Security Amendment to promote cost-effective care, caused hospitals to rethink positions on inpatient resource utilization. Reducing hospital stay proved to be a viable way to accomplish this objective as physicians, key hospital stakeholders, considered length of stay (LOS) to be a somewhat discretionary element of care.[27] Home-based care has been recognized as a vital component of the health delivery system and an important element in health care reform. Therefore it is important to learn

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[26]Pamela Bean, " Readmission Study Leads to Continuum of Care," Nursing Management 26, (September) : 65-8.

[27]E. Greer, " Increasing Home Health Service Referrals , Boon or Bane?," Home Health Care Services Quarterly 14, (1994) :49-67.

which approaches are cost-effective, successful in promoting health and well being, and allow individuals to reside at home or remain as independent as possible.[28]

Discharge planning is "a centralized coordinated program to ensure that each patient has a planned program of continuing care and /or follow up which meets his/her post discharge needs". Although discharge planning for patient post-acute continuing care has been a part of hospital care and social work practice for 50 years, the importance and visibility has changed dramatically in the past decade.[29] Discharge planning also has a direct impact on the quality of patient care, because patients who have complex medical, social, and financial problems are being released needing more intensive services outside of the hospital. For this reason, regulators now mandate effective discharge planning as part of the hospital's role in health care. The discharge planning function was pivotal in the past. It is more crucial now as changes in reimbursement patterns and governmental regulations make early discharge an economic necessity for patients and hospitals.[30]

Discharge planning by nature is a multidisciplinary process, since many disciplines have input into assessing the post-acute needs of the patients, although traditionally the responsibility has fallen to social workers, nurses, and to a lesser extent, physicians.[31]

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[28]Donna J. Rabiner, "The Effects of Channeling on Home Care Utilization and Satisfaction with Care," The Gerontologist 35, (1992) : 186-95.

[29]John Feather, "Factors in Perceived Hospital Planning Effectiveness," Social Work in Health Care 19, (1993) : 1-13.

[30]Susan Blumfield, "Redefining Discharge Planning and Expanding Social Work," Social Work in Health Care 13, (1988) :31-47.

[31]K.W. Davidson, "Evolving Social Work Roles in Health Care: The Case of Discharge Planning," Social Work in Health Care 4, (1978) : 43-54.

However, a multidisciplinary approach can lead to confusion and overlapping responsibilities rather than teamwork. Each care giver or provider thinks only in terms of its special interest or commitment, failing to see the eldercare as an integrated system and over looking the interconnectedness of eldercare problems. Consequently, too many well-intentioned caregivers and providers possess a "but that's not my department" mind set.[32] A range of complexity is encompassed in discharge planning. A beginning point in the spectrum is the patient requiring some home health support in an otherwise acceptable home environment. In the middle range might be the patient and family who have had time to anticipate the inevitability of placement and who possess the ego strength to adjust to the necessity of placement.[33] Assessment and planning during hospitalization would facilitate the goal of seamless care for these high risk individuals in the most cost effective manner. Evidence of a problem is pivotal in legitimizing home health intervention because it is the medical problem or concern that sparks the individual's referral for home care services. As a result, a focus on the problem is inherent in the referral process. In naming the problem(s), attention is called to the patient's capacity deficits which in turn direct the specifics of which services are delivered.[34]

Home health care is an area of growth in the health care delivery system. Its

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[32]Robert Addelman, "Eldercare: Out of the Institution and into the Community," Health Care Forum Journal, (May 1995) : 58-63.

[33]Claire Bennett, "The Drama of Discharge: Worker and Supervisor Perspectives," Social Work in Health Care 11, (1986) : 1-11.

[34]Jackie Pray, "Maximizing the Patient's Uniqueness and Strengths: A challenge for Home Care," Social Work in Health Care 17, (1992) : 71-9.

expansion is largely related to such multiple and interrelated demands as cost containment efforts, shorter lengths of stay in hospitals and patient's increasing needs for long term care. Home health care services have proliferated as an alternative to institutional care. Consumers and medical care providers are turning to home health care programs to meet multiple demands: preventing unnecessary hospitalization; reducing hospital lengths of stay and readmission rates; and offering alternatives to nursing home placements. Patients are being discharged from hospitals earlier with serious medical sequelae that need to be treated at home. Projected increases in the elderly population coupled with medical technology prolonging life expectancy mean that home health care services will continue to play an increasingly significant role.[35]

Home care has become a major source of relatively affordable care as the health care system, the government, hospitals, and other providers try to control cost with efficient use of health care and long term care. Cost savings result from replacing high cost institutional care with professional care and personal care often provided by family and friends. The health care that patients receive in the privacy and comfort of their own home break the past pattern of confining sick, handicapped, diseased and mentally ill. Expansion of Medicare benefits, lower costs at home relative to hospital care, and modern technology are among reasons home care has become the fastest growing segment of health care services and the second fastest growing industry in the economy as of October

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[35] Ibid., 73.

1994.[36]

Home based care has been recognized as a vital component of the health care delivery system. Townsend et al studied a community based discharged scheme' for elderly patients over the age of 75. The elderly patients were divided into two groups, a treatment group and a control group. This study involved the use of care -attendant support for the first day back home and for up to 13 hours a week for two weeks. Readmission rates over the ensuing 18 months were significantly higher in the control group and their average length of stay on readmission was higher (30.6 days compared with 17.1 days). Among those who lived alone, people who received only standard care were readmitted more than twice as often as those who had been supported by care attendants.[37]

Although patients may recuperate better at home with a coordinated plan of in home services, social workers are many times forced to develop makeshift discharge plans and hope for the best. After patients are discharged, social workers rarely have time to make a follow up assessment on the adequacy of the discharge plan. [38] Organizations with ambitious visions are working toward integrating multiple levels of care to serve the chronically ill in more comprehensive fashion than has ever been known before. Still, the

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[36]Laura Freeman, "Home Care in the 1990's," Journal of the American Medical Association, (March 1990) : 1241-44.

[37]John Townsend, "Emergency Hospital Admissions of Patients aged over 75 years and the Effects of a Community Based Scheme," Health Trend, (April 1994) : 136-9.

[38]Judith Dobrof, "DRGs and the Social Worker's role in Discharge Planning," Social Work in Health Care 16, (1991) : 44-5.

rapid growth in the number of people who need chronic care offers a bright future to institutions that truly address comprehensive care needs. In chronic care, you have patients who are impaired and bounce in and out of the system with frequency. One program in particular, PACE (Program of All Inclusive Care for the Elderly), a HCFA national demonstrative project, shows how creative, innovative solutions can be used to meet the needs of the frail elderly. PACE provides an alternative to institutionalization by helping participants to remain at home, where they are healthier and thus often happier. And the capitated arrangements offers providers large cost savings. [39]

Researchers have also examined the use of Home Health Services along with other interventions to see its effects on hospital readmissions among the elderly. In a study conducted by Rich and Vinson, a multidisciplinary approach was used to significantly reduce hospital readmission for elderly people with chronic illnesses. In the study patients 70 years old and older who were hospitalized with Congestive Heart Failure were randomly selected to receive either the study treatment or conventional care. The intervention consisted of comprehensive education of the patients and family, a prescribed diet, social service consultation and intensive home health follow up. During the 90 day follow up, the treatment group had a 27 percent reduction in the readmission rate. The findings in this study indicate survival 90 days without readmission, the primary end point occurred in 75 patients in the control group (53.6%), as compared with 91 patients in the treatment group (64.1%), but this difference was not significant. Multidisciplinary

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[39]Allison Cleary, "The Long View on Long-Term Care," Hospitals and Health Networks, (March 1995) :61-5.

intervention can improve quality of life and reduce hospital readmissions among the elderly with congestive heart failure.[40] This study had several limitations, the first has to do with the generalizability of the results. Secondly, the nature of the intervention that was used makes it difficult to determine which elements were important in reducing the readmission rates.

Research indicates that utilization experience of community-based elderly showed 25% and 31% of older impaired adults received formal home care services. The services may be as fundamental as help with activities of daily living (ADLs). These activities and physical tasks relate to personal care and include dressing, bathing, getting out of bed, and feeding ones self. Heart patients are monitored and treated at home by hospital based teams using fiber optics-telecommunications.[41] In a quasi-experimental study conducted by Oktay and Volland to determine the effectiveness of a support program for care givers following hospital discharge, it was suggested that not only would the study provide insight into the need to provide support to the care givers of the elderly it could very well lead to the reduction of institutional care. In the study, subjects received a coordinated approach similar to that of the multi disciplinary approach with the use of a project team. However, the amount of services depended on the need. Patients were assigned to either a comparison group or a treatment group when discharged from the hospital. Both groups

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[40]Micheal Rich, "Multidisciplinary Intervention to prevent the Readmission of Elderly with Congestive Heart Failure," The New England Journal of Medicine 33, (November 1995) : 1190-5.

[41]Laura Freeman, "Home Sweet Home Health Care," Monthly Labor Review, (March 1995) : 3-11.

received identical interviews. A variety of services were available to the comparison group, for example home health, visiting nurses, and home health aides etc. On the basis of the hospital charts, the patients in this study used an average of 33.9 hospital days during this study. There was substantial difference in the number of days that patients in the treatment and in the comparison groups were hospitalized. Patients in the comparison group averaged 38.5 days in the hospital (of which 21 days were for index hospitalization); while patients in the treatment group were hospitalized on the average of 29.1 days (of which 16 days were for the index hospitalization). Thus the patients in the Post Hospital Support program had fewer hospital days both in the initial hospitalization and subsequent year.[42] The findings in this study indicated that patients who participated in the post-hospital support group spent fewer days in the hospital. Although this study was not primarily designed to look solely at hospital stays and readmissions, the reduction in health services utilization suggested by the results were intriguing. The results are promising in that they suggest that programs designed to support the frail elderly population and their caregivers can be cost efficient by reducing levels of health utilization.

As researchers seek to increase a better understanding of the elderly and their risk for hospital readmission they have taken a closer look at the effects of coupling home health services (formal services) with care givers (informal services) within the home. Implementation of both services may cut down readmission rate. A study conducted in Sweden by Melin and Hakansson examined a physician-led primary home care intervention

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[42]Julianne Oktay and Patricia Volland, "Post-Hospital Support Program for the Frail Elderly and their Caregivers: A Quasi-Experimental Evaluation," American Journal on Public Health 80, (January 1990) : 39-45.

program that was offered to chronically ill patients at the home after discharge from hospital as an alternative to "ordinary"care.[43] The aim was to compare the cost effectiveness of ordinary care of elderly dependent patients after discharge from an acute hospital(s) with primary home care intervention program. The subjects were placed in a control group and a team group. On the day of the team patients discharge, the patient's district nurse and home services assistant made a visit to assess the need for medical and home services. The findings in the study revealed that the team players, on average spent fewer days in the hospital. The team patients had received significantly more visits by the physicians, district nurse, physiotherapist, assistant nurses and even night patrols than did the control patients.[44]

Hospital readmission rates can also reflect a treatment effect. In a recent study, hospital readmission rates were identical in both groups studied, as was the mean number of readmission hospital days. However, when readmission rates were followed for a longer study period, significantly higher rates in the control group that in the team group, and readmitted control patients used more hospital days. In a similar study by Melin and Hankansson, no significant group differences where found in the readmission rates or in the mean number of readmission hospital days, which probably indicated the cooperation

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[43]Ibid., 43.

[44]Anna-Lisa Melin and Lars Bygren, "The Cost-Effectiveness of Rehabilitation in the Home: A study of Swedish Elderly,"American Journal of Public Health 83, (March 1993) : 356-62.

between primary home care and home help services could be improved.[45]

It is imperative that the social work profession use its expert advocacy skills to promote both an increase in post-hospital health care resources and to develop mechanisms for financing this care. Case management services must be provided both in hospitals and community in order to follow the patient along the continuum of the health care delivery system and to ensure that patients are receiving necessary medical treatment and home care services. It is also imperative that the social work profession recognize the way in which a prospective reimbursement system has changed the working environment of the hospital social worker and has resulted in increased and, many times contradictory, demands which are placed on him/her in the effort to discharge the patient as quickly as possible. As the work has become even more short-term and crisis oriented, the social worker is less likely to be rewarded with a patient who makes noticeable gains.[46]

## Theoretical Framework

Theorists Germaine, Meyer, and Sopin advocated perspective social work practice that revolved around systems theory. The general systems theory provides the framework for the association between Home health care and a decrease in hospital readmission rates among elderly patients who have been diagnosed with Congestive Heart Failure (CHF). According to general systems theory, individuals are in constant interaction or transaction

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[45]John Townsend and Mark Piper, "Reduction in Hospital Readmission Stay of Elderly Patients by Community Based Hospital Discharge Scheme: A Randomized Controlled Trail," British Medical Journal 297, (May 1988) : 544-47.

[46]Judith Dobrof, "DRGs and the Social Worker's Role in Discharge Planning," Social Work in Health Care 16, (1991) : 37-53.

with members of immediate family, networks of friends and acquaintances, employment help, welfare and a multitude of other systems that are shaped by the interactions with one's family culture and society. The focus of attention for assessment and intervention goes beyond individual or family to evaluating those systems that appear to be of extreme importance to the resolution of the problem to which help is sought.

This theory suggests that a primary characteristic of any system is that all its parts are in transaction. Therefore, whatever affects one part of the system to some degree affects all parts. Basically, changing one aspect causes changes in the others. In essence, the transitional process of adaptation occurs when people's influences shape their environment and in turn are influenced and shaped by them.[47]

This theory proposes that there must be a match or fit between individuals and their environment. The interdependence of systems and their components becomes apparent in every situation that comes to the attention of social workers. When two systems are interacting because they have a common member, occurrences in one system will ultimately affect the other system. This concept is referred to as input to one system to another or as transactions between systems. Individuals being influenced by many forces at the same time undoubtedly will have to arrive at some resolution. Decisions may be made to affect some positive change in the environment. Not only are all aspects of the system involved in the problem, the actions of any member can contribute to the solution. Individuals have to make some changes within themselves when they attempt to cope with

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[47]Mary Woods and Florence Hollis, Casework: A Psychosocial Therapy , 4th ed., (New York: McGraw and Hill, 1990), 28-30.

or modify their situations or their relationship to others. The personality is itself a system composed of various conflicting sources. Each action and response is shaped by their internal forces as well as by the strains and gratification experienced from others with whom the individual is interacting.[48]

A number of social systems provide goods and services needed by clients. Diverse social systems are either part of the problem or represent resources needed to improve goodness of fit between personal and family needs and environmental resources. Systems that are central in a persons's life play key roles as both sources of difficulty and resources that may be utilized or modified in problem solving.

Theorists have recently recognized that adults have vital needs that can be met only through a nurturing environment. One of the vital needs that are met through social support systems involve physical care when a person is unable to care for him or herself due to illness, incapacity or severe disability.

Stressors associated with certain problems can be so severe that without consistent and reliable responsiveness from social support systems, affected persons may experience serious breakdowns in functioning. This theory suggests that the absence of support systems render people vulnerable to major maladaptation to external stress. In contrast the presence of adequate support systems has a tendency to reduce the impact of stressful situations and facilitates a successful adaptation.[49]

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[48]Ibid.,30.

[49]Dean Hepworth and Joann Larson, Direct Social Work Practice, 4th ed., (Salt Lake City, Utah: Brooks and Cole Publishing, 1993), 267-71.

Based upon these premises, it is logical to use the general systems theory to support the relationship between increased Home health care and decreasing hospital readmission rates among elderly patients diagnosed with Congestive Heart Failure (CHF). When working with a patient from this particular population there are numerous systems involved. They include the patient, family, social worker, health care team comprised of medical doctors, nurses, case managers, home health agencies, utilization review nurses, friends or relatives.

The hospital social worker appears to be the "gate keeper" or coordinator of all the services provided because it is his or her job to contact and advocate with these various systems on the patient's behalf. Due to the pertinent role that the hospital social worker plays in a CHF patient's life, one could assume that the lack of adequate skills and training in communication with different systems could have a detrimental impact upon the quality of care the patient receives at home. So by the various systems such as medical doctors, social workers, discharge planners and home health care staff's inability to correspond with one another the patient may be made to suffer through either replication of services or a host of needs being unmet.

Despite the vital need of hospital social workers's intervention practices the growing trend in Managed Care has forced health care systems to focus on cost-containment. The ethical standards of social workers have been challenged by and compromised. The system of managed care has basically forced the hospital social worker to face an ethical dilemma. In one instance he or she is forced to increase efficiency and incorporate cost effectiveness from a managed care perspective. Simultaneously, he or

she must continue to identify needs while continuing to provide quality patient care based upon his or her own ethical standards. Managed care seems to espouse the concept of financial quantity as oppose to quality care. Hospital social workers are no longer afforded the luxury of conducting 30-40 minute assessments. These assessments are crucial because it allows the social worker to explore the issues related to the patient's living arrangements, financial status, medical benefits, family dyanamics, and any other services that they may already be receiving. However, managed care seems to have imposed shorter time limits for all services rendered, including assessments. If very little time is spent on finding out the psychosocial aspects of a patient, the end result is that a patient could be discharged home with unmet needs. Failure on the part of the social worker to identify these needs is not beneficial to the patient and is not cost-effective for the hospital since it could put the patient at risk for early readmission.

The system of home health care appears to make the transition easier for CHF patients leaving the hospital and returning to the community. By providing nutritional and medication education, nursing care, home maker services and transportation this system seems to ease the burden and stressors associated with the patient having survived a tramatic experience and being re-introduced to his or her home environment. The greatest threat to a person's integrity, independence, and wholeness is the inability to live at home. Even as their physical health declines, the elderly prefer the support services that enable them to sustain their independence in their own home and remain connected to the surrounding community.

As previously stated, the absence of a comparable support system may cause a

patient to become vulnerable to major lifestyle adaptations. For instance, CHF patients frequently experience a lifestyle overhaul. Basically, they experience changes in their diet, daily exercise, and education on prescribed medications. Educating patients on the disease process will keep them abreast of their condition. In turn patients may communicate early symptoms to their physician and avoid a potential readmission.

The home health care system reduces the impact of the stressful situation of returning home and moving out of the protective confines of the hospital through continued support. It often facilitates a patient's successful adaptation. Without the intervention of home health care systems, the client system which is under duress may inevitablely be hospitalized.

## Definition of Terms

Managed Care: A method of coordinating and delivering health care, primarily through health maintenance organizations and other provider networks.

Health Maintenance Organizations (HMO): Prepaid health plans that provide a range of services in return for a fixed premium.

Congestive Heart Failure (CHF): An illness in which the heart looses it's ability to pump blood to meet the body's needs. Blood flow to the vital organs and muscles of the body become impaired and blood backs up the veins and lungs which can lead to fluid build up in legs, abdomen, and lungs.[1]

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[1]Donna M. Lewandowski, "Congestive Heart Failure," American Journal of Nursing, (May 1995) : 36.

Social Worker: A community agent who promote patient control over decision making. They negotiate with key participants to develop plans that meet various needs, usually including those of: family members; health care providers; the institution; reimbursement sources; and referral resources.

Discharge Planning: The process of assessing the needs of hospitalized patients for post acute care and developing a coordinated plan to provide care needed.[2]

Home Health Care: As defined in the standard classification manual are establishments primarily engaged in providing skilled nursing or medical care in the home under supervision of a physician.[3]

## Statement of the Hypotheses

Hypothesis I: There is a statistically significant relationship between skilled nursing intervention and patient readmissions.

Hypothesis II: There is a statistically significant relationship between MSW intervention and patient readmissions.

Hypothesis III: There is statistically significant relationship between home health aides and patient readmissions.

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[2]John Feather, "Factors in Perceived Hospital Discharged Planning Effectiveness," Social Work in Health Care 19, (1993) : 1.

[3]Laura Freeman, "Home Sweet Home Health Care," Monthly Labor Review, (March 1995) : 4.

# CHAPTER 3

# METHODOLOGY

## Research Design and Sample

The design used in this study is content analysis. The objective of content analysis was (1) to examine whether high hospital readmission rates for patients diagnosed with congestive heart failure resulted from limited access to various home health services, (2) look at the number of services provided to patients post-hospitalization, and (3) observe the number of hospital readmissions that occur within 30 days of hospital discharge.

The sample used in the study was comprised of fifty patient charts of private and Medicare beneficiaries 65 years of age and older with a diagnoses of Congestive Heart Failure. No limitations were placed on the patient's age, sex, or pay source. The data was collected from Staffbuilders Home Health agency, located in Atlanta, Georgia.

Staffbuilders services numerous individuals throughout metro Atlanta and surrounding cities. The agency promotes family involvement through teaching caregivers at home how to provide care, expedite recovery, and minimize or prevent hospital readmissions. The agency goal is to help each client achieve his or her maximum level of health and independence. The agency's program is carefully designed for each client to assist in selecting the best health team for each case. The relationship between the client and the home care professional is closely monitored to ensure continuing satisfaction and confidence.

Staffbuilders offers a variety of specialty staff that include: Registered Nurses, Licensed Practical/ Vocational Nurses, Physical, Occupational and Speech Therapists,

Medical Social Workers, Nutritionists, Home Health Aides as well as Homemaker Services. The agency also provides routine home care, high tech services, durable medical equipment, routine supplies and pharmaceuticals. The agency's focus is geared toward enabling clients to recuperate in the comfort and privacy of their own homes. Depending on client need, care is available, on a per visit, hourly, daily, or live-in basis seven days a week around the clock.

In conducting this study, stratified sampling was used. This sampling technique was used to randomly select the participants in the study. The home health agency was selected for reasons of feasibility. Its feasibility was due to knowledge of the agency based on a previous working relationship.

## Data Collection Procedures

A letter explaining the nature of the study was sent to the Director of Staffbuilders Home Health agency. After receiving authorization to conduct the study, the researcher signed consent for proof of confidentiality confirming that information used from the charts in the study will not include any of the patient's names nor will the researcher disclose any of the information viewed with any individual(s) outside of the agency. The researcher in conjunction with a Quality Assurance Nurse, collected data directly from patient charts. The charts were selected randomly, based solely on the diagnosis of Congestive Heart Failure with no consideration placed on patient's sex, age or race. Each chart was reviewed individually and for confidentiality patients were identified with an identification number instead of their names. Information was gathered from the Patient Care Plan, Medical Doctor's discharge plan, Nursing Notes, and Medical Social Worker

Notes. The data collected was based on various support services that a home health agency would provide in the home depending on patient need. Each time a service was identified in the chart, the patient would receive a numerical notation. If one or more of the services on the support services chart were used, the patient would receive a 2. If services were not rendered, the patient would receive a 1. Numerical notation was used so that the researcher would be able to maintain the total number of services provided.

The independent variable is hospital readmissions. The dependent variable is home health care. These variables were measured by analyzing the patient's hospital readmission rates. The data collection instrument used to measure patient support services was developed by the researcher. The data collection instrument consists of nine services that are often provided to patients who have been diagnosed with congestive heart failure. These services include: (1) RN evaluations, (2) Medication education, (3) Nutritional education, (4) Social Service visits, (5) Home Health Aides, (6) Skilled Nursing visits, (7) Transportation, (8) Meals on Wheels, (9) Physical/ Speech Therapy. The table has two sections related to patient information. Section I provided demographic information needed for analysis. This section included patient identification, age, race and pay source. Section II consisted of patient's diagnosis and number of readmissions with same diagnosis.

## Data Analysis

The data analysis procedure used to analyze data was Chi-Square. Chi-square was used to compare the statistical significance between the number of skilled nursing services provided to patients and the number of patient readmissions that occurred within 30 days

of patient discharge; and to compare the statistical significance between the amount of MSW visits and patient readmissions: and the number home health aide visits and the number of patient readmissions. The probability level selected for the study was .05.

# CHAPTER 4

## PRESENTATION OF RESULTS

Of the population of patients diagnosed with Congestive Heart Failure, 40 patient charts were selected as part of the study. A comparative evaluation of the data was ascertained by employing chi-square. Frequency distribution with percentages were applied to describe frequency of support services provided to patients with congestive heart failure and hospital readmissions. Chi-square was used to analyze the relationship between home health care and readmissions. For this study, the .05 probability level was selected as the measure of statistical value.

Table 1. illustrates the frequency distribution data collected from the 40 patient charts with diagnosis of Congestive Heart Failure. Of the 40 patients, 33 were female and 7 were male. Eighty-three percent were Medicare beneficiaries; 10% received Medicaid; and only 7% had Private Insurance.

The findings from the frequency distribution indicate that 97% (n= 39) of the subjects received RN evaluations as part of their patient care plan. Three percent (n= 1) of the subjects did not receive an RN evaluation as part of their post-discharge care. Seventy-eight percent (n=31) of the subjects received nutritional education related diet and fluid restrictions. While 22% (n= 9) of the population did not receive any education related to diet restrictions or nutrition management.

In response to subjects receiving Medication education, with emphasis on dosage requirements and adverse reactions, 37 of the subjects (98%), received education as part of their treatment regimen. While 3 subjects (7%), returned home with no medication

education as part of their patient care plan. Fifty-five percent (n= 22) of the subjects received a MSW visit at home to determine any need(s) or link to community resources. However, 45% (n= 18) of the subjects did not receive any MSW visits for needs assessments.

In reference to the number of Skilled Nursing Care visits, 97% (n=39) received some form of routine nursing care as part of their discharge plan. Three percent (n= 1) of the patient returned home without a skilled nursing care visit. The findings from the frequency distribution data indicated that 68% (n= 27) of the subjects received assistance from a Home Health Aide. Thirty-two percent (n= 13) of the subjects went home without the assistance of a home health aide. Only 12 (30%) of the subjects discharge home received Homemaker Services as part of their care plan. Twenty-eight (70%) of the subjects returned home without homemaker services included as a part of the patient care plan.

Of the 40 patients used in the study, only 43% (n=17) received some form of rehabilitative therapy as part of their treatment regimen. Fifty-seven percent (n=23) of the patients did not receive any rehabilitative therapy at all. In reference to whether or not the subjects received any Durable Medical equipment post-hospitalization, only 10 of the subjects (25%) received medical equipment as part of their discharge plan. Thirty of the patients (75%) did not receive any durable medical equipment.

Concerning the number of patients who were readmitted to the hospital within 30 days of hospitalization, only 30% (n=12) of the subjects had readmissions. Seventy percent (n= 28) of the subjects were not readmitted for treatment within 30 days of

discharge.

TABLE 1. FREQUENCY DISTRIBUTION OF VARIABLES

| Variable | Frequency | Percentage |
|---|---|---|
| **Gender** | | |
| Male | 7 | 18.0 |
| Female | 33 | 82.0 |
| **Insurance** | | |
| Medicaid | 4 | 10.0 |
| Medicare | 33 | 83.0 |
| Private | 3 | 7.0 |
| **RN Evaluation** | | |
| Yes | 39 | 97.0 |
| No | 1 | 3.0 |
| **Nutrition Education** | | |
| Yes | 31 | 78.0 |
| No | 9 | 22.0 |
| **Medication Education** | | |
| Yes | 37 | 93.0 |
| No | 3 | 7.0 |
| **MSW Visits** | | |
| Yes | 22 | 55.0 |
| No | 18 | 45.0 |
| **Skilled Nursing** | | |
| Yes | 39 | 97.0 |
| No | 1 | 3.0 |

TABLE 1. (Continued)

| Variable | Frequency | Percentage |
|---|---|---|
| **Home Health Aide** | | |
| Yes | 27 | 68.0 |
| No | 13 | 32.0 |
| **Homemaker Services** | | |
| Yes | 12 | 30.0 |
| No | 28 | 70.0 |
| **Rehabilitative Services** | | |
| Yes | 17 | 43.0 |
| No | 28 | 57.0 |
| **Medical Equipment** | | |
| Yes | 10 | 25.0 |
| No | 30 | 75.0 |
| **Readmissions** | | |
| Yes | 12 | 30.0 |
| No | 28 | 70.0 |

This study proposed three hypotheses. The first stated that there is a statistically significant relationship between skilled nursing intervention and patient readmissions. The second suggested that there is a statistically significant relationship between MSW intervention and patient readmissions. The final inferred that there is a statistically significant relationship between home health aide intervention and patient readmissions. Chi-square was the measure of bi-variate analysis used to determine if each of these relations were statistically significant. The .05 probability level was chosen to ascertain whether to accept or reject these three hypotheses.

Table 2. displays the results of the first chi-square analysis. The findings do not indicate a significant relationship between skilled nursing intervention and patient readmissions. Sixty-nine percent of the patients who are not readmitted within 30 days had visits from skilled nurses. Thirty-one percent of the patients who were readmitted within 30 days had skill nursing visits. With x2= .439, df= 1, and p= .507. There is no statistically significant relationship between skilled nursing intervention and patient readmissions. Therefore, this hypotheses is rejected.

TABLE 2. OBSERVED FREQUENCIES AND PERCENTAGES: SKILLED NURSE BY PATIENT READMISSION

| | Results | | |
|---|---|---|---|
| **Type of Intervention** | **No Readmits** | **Readmits** | **Totals** |
| No Skilled Nursing | 1 (100.0) | 0 (0.0) | 1 (100.0) |
| Skilled Nursing | 27 (69.0) | 12 (31.0) | 39 (100.0) |
| Totals | 28 | 12 | 40 |

x2= .439 df= 1 p= .507

Table 3. illustrates the findings from chi-square analysis relating to the second hypothesis. The data does not indicate a significant relationship between MSW intervention and patient readmissions. Seventy-two percent of the subjects who did not receive MSW intervention were not readmitted within 30 days. While twenty-eight percent who did receive MSW intervention were not readmitted in 30 days. Sixty-eight percent of the participants who were not readmitted within 30 days received MSW intervention. Thirty-two of the patients who were readmitted within 30 days received MSW intervention. With x2= .077, df= 1, and p= .78. There is no significant relationship between these two variables. Therefore this hypothesis is rejected.

TABLE 3. OBSERVED FREQUENCIES AND PERCENTAGES: MSW INTERVENTION BY PATIENT READMISSION

| | Results | | |
|---|---|---|---|
| **Type of Intervention** | **No Readmits** | **Readmits** | **Total** |
| No MSW Visits | 13 (72.0) | 5 (28.0) | 18 (100.0) |
| MSW Visits | 15 (68.0) | 7 (32.0) | 22 (100.0) |
| Totals | 28 | 12 | 40 |

x2= .077 df= 1 p= .781

Table 4. depicted the findings from chi-square analysis and does not indicate a significant relationship between home health aide intervention and patient readmissions. Of the findings, sixty-one percent of those patients who were not readmitted within 30 days, did not receive home health aide intervention. Seventy-four percent of the patients who were not readmitted within 30 days received home health aide intervention. Twenty-five percent of those readmitted within 30 days, did not receive home health aide intervention. Thirty-eight percent of the patients readmitted within 30 days received no home health aide intervention. With x2= .656, df= 1, and p= .417. There is a statistically significant relationship between home health aide intervention and readmissions within 30 days. Therefore the hypothesis is rejected.

TABLE 4. OBSERVED FREQUENCIES AND PERCENTAGES: HOME HEALTH AIDE INTERVENTION BY PATIENT READMISSION

| | Results | | |
|---|---|---|---|
| **Type of Intervention** | **No Readmits** | **Readmits** | **Total** |
| No Home Health Aide | 8 (61.0) | 5 (38.0) | 13 (100.0) |
| Home Health Aide | 20 (74.0) | 7 (25.0) | 27 (100.0) |
| Totals | 28 | 12 | 40 |

x2= .656 df= 1 p=.417

# CHAPTER 5

# DISCUSSION AND IMPLICATIONS

## Summary of Findings

The findings of this study indicated no significant relationship between the implementation of skilled nursing services and patient readmissions. This unexpected finding could be attributed to the fact that each patient, as part of their patient care plan received an RN evaluation for needs assessment and during the assessment the RN may have identified a potential risk factor that may have been associated with Congestive Heart Failure which may have resulted in an unplanned admission to the hospital. The ratio of nurses to patients may have been an additional factor. Heavy case loads may cause a decrease in the amount of time spent with patients during a routine visit. In addition, based on the patient's insurance he or she may be limited to the number of visits that the provider will reimburse the agency. Since the support services survey only used a check off approach for this variable, limitations may not be accurately reported since it was acquired from the patient care plan. Patients receiving skilled nursing care may have refused services that were offered as a part of the treatment regimen.

Secondly, MSW interventions were not found to be related to patient readmissions. Although Medical Social Workers are trained to perform various duties, including linkage to community resources, sometimes they do not always act in the capacity of that role. Many times patients are diagnosed with various illnesses and since social workers are not trained in all the aspects of medical treatment it can affect patient aftercare plans. The worker's inability to know all the aspects of the disease process may

not illicit services that would be beneficial to the patient's recovery. The social worker may be impacted by other unpredictable and uncontrollable complications, limited amount of services due to insurance benefits could prove to be a major factor, as well as, the demand on the amount of time spent with patients. This could hinder the delivery of services when workers have heavy case loads. There may also be a social complication, which brings with it barriers which effect the outcome of interventions. These barriers, which could complicate the social service plan, which may include patient and family barriers, community resource barriers and often times hospital barriers. Having these barriers does not necessarily mean a negative outcome, but rather implies that social workers on behalf of patients are often times complicated by these barriers.

Finally, participation of home health aide was not found to be significantly related to patient readmissions. This may be due largely to the fact that many of the elderly patients who return home from the hospital have family who are actively involved in the patient's aftercare plan. It may not be feasible for the patient to return home and he or she may relocate to a skilled nursing home instead. Also, if the family has been a vital part of the discharge planning process, they may be educated on the patient's disease process and trained on how to successfully manage the patient at home.

## Implications for Social Work Practice

The findings of this study was not statistically significant but the study could still lend importance to the evaluation of hospital readmission rates. Given all the limitations of the findings, it appears that on the surface they were of little value. But it is just as important given the findings that social workers continue to focus on ways to reduce

readmission rates. This study could serve as an example for future research and can easily be replicated in any health care setting where social work and discharge planning are governed by a managed care system. The findings of this study could prove to be beneficial to both social workers and discharge planners. Knowing that patients who went home with skilled nursing care were less likely to be readmitted than those who did not could prove to be valuable. In keeping with the trends of managed care the social workers may find that advocating for more skilled nursing services at home could greatly decrease the risk for readmission. If nurses receive authorization for increased visitations the early detection of medical changes can be presented to the physician and the patient could be seen in the doctor's office instead of in the hospital. It is also imperative that social workers look at providing additional sources of support for patients who are going to live with relatives in order to reduce the likelihood of hospital readmissions. As managed care continues to ameliorate the health care system with its cost-effective measures, social workers must continue to advocate for more support services. Many social workers are finding themselves dealing with the duality of being both the social worker and the case manager. Along with this new role is a limited amount of time devoted to patient care and an abundance of restrictions from their providers. With this in mind social workers must continue to advocate for as many home care services that insurance providers will allow. The transition that many elderly patients make when they return home can be overwhelming. If a social worker is able to send a patient home with more than an adequate amount of services, he or she will be comfortable with the early discharges related to the managed care changes in the medical arena.

## Future Research and Limitations

This study has several limitations, the first of which concerns generalizability of the results. The sample size for this study included only 40 patient charts with a diagnosis of Congestive Heart Failure. In the future more patient charts should be considered for the study. Several other diagnoses related to congestive heart failure were excluded from the study. The applicability of the results to other patients with similar diagnoses could require further study. A second limitation to the study is that because home health care can be viewed as a multidisciplinary system within itself, the researcher was unable to determine which facets were most important in reducing readmission rates. In the future, one area of service should be considered to determine its effect on readmission rates. For this study the researcher relied on data that was collected by someone else. This may compromise the validity and reliability. This study could be improved in future research by having the researcher collect data for his/her self through the use of self-reports and interviews. The study was conducted at only one home health agency and it limits the representativeness of the sample. This study could be improved in future research by using several facilities to get a representative sample. The researcher did not collect data time periods for length of home health care interventions, so correlations were not able to be obtained because the researcher used categorical data for the study. This study could also be improved in the future by collecting data on the number of times readmissions occurred and length of home health care visits to determine the strength and direction of relationships between variables. The researcher would then be able to determine that if the amount of home health care is increased, hospital readmissions will decrease.

# APPENDIX

# APPENDIX A

945 Crestmark Boulevard
Suite 413
Lithia Springs, Georgia 30057
March 10,1997

Audrey Finley, RN
Director of Quality Assurance
Staffbuilders Home Health
1835 Savoy Drive, Suite 205
Atlanta, Georgia 30341

Dear Mrs. Finley:

I am a Graduate student at Clark Atlanta University preparing to conduct a study on the effects of Home Health Services on readmission rates among the elderly who are diagnosed with Congestive Heart Failure.

In terms of an increase in the number of home health care service, I hope it will beneficial in providing your patients with optimal care. The findings will furnish your agency with information on how effective Home Health care is if used properly as an intervention. I am very optimistic about the study and it's findings and I am looking forward to your decision regarding your hospital's participation in the study.

Thank you in advance for your time and consideration.

Sincerely,

Alicia D. Freeney
Graduate Student, Clark Atlanta University

# APPENDIX B
# PATIENT SUPPORT SERVICES

| ID | SEX | INS | RN EVAL | MED ED | NUT ED | MSW VISIT |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |

Key: 1 = No services rendered
2 = Services rendered

# APPENDIX B
# PATIENT SUPPORT SERVICES CONTINUED

| ID | SKILL NURSE | HHA | HOMEMAKER SVC | PT/OT/ST | DME | READMIT |
|---|---|---|---|---|---|---|
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Key: 1 = No services rendered
2 = Services rendered

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# APPENDIX C

## CONFIDENTIALITY AGREEMENT



Re: _____
~~Employee~~
MSW Graduate Student

The undersigned, in consideration of being ~~employed by Staff Builders~~, Inc., a subsidiary or affiliate thereof (collectively referred to herein as the "Company"), agrees as follows:

I hereby acknowledge that in the course of my employment, the Company will make available to me confidential and secret information consisting of lists containing the names, addresses and salaries of Company employees, lists of the names and addresses of customers and information relating to the Company's financial and/or contractual relations with such customers, administrative manuals, directives and policies relating to the internal operations of the Company, and various documents containing information relating to the Company's recruiting, training, operating, advertising, marketing and soliciting functions, as well as other non-publicly disclosed financial information, (hereinafter collectively referred to as the "Proprietary Materials"). I acknowledge that said Proprietary Materials constitute a vital part of the Company's business and have been developed by the Company and maintained by it at considerable time and expense; and that such Proprietary Materials are, by their very nature, trade secrets and confidential information, knowledge of which is not generally available to the public and access to which is only being made to me to enable me to perform the duties for which I was hired. Employment of me and access to such Proprietary Materials is being extended to me on the Company's reliance that I will observe the following covenants and agreements.

I specifically agree that:

1. During the course of my employment I will use the Proprietary Materials only in connection with my employment and will not disclose the same to any other person except to the extent the Proprietary Materials are used by such person in connection with employment by the Company.

2. Following separation from the Company for any reason, whatsoever, I,

   (a) will deliver immediately to my immediate supervisor in the Company or the Company's designated representative, all Proprietary Materials in my possession, and all other property, materials and records of any kind relating to the Company's business that may be in my possession, custody or control;

   (b) will not directly or indirectly:

      (i) disclose, solicit or use, or permit any other person to disclose, use or to have access to the Company's Proprietary Materials as defined hereinabove;

(ii) cause any other employee of the Company to breach or terminate their respective restrictive agreements with the Company; or solicit any other employee to leave the Company's employ;

(iii) solicit or induce any client of the Company to terminate the relationships the client has with the Company.

3. The foregoing covenants as set forth in paragraphs 1 and 2 shall be construed and enforced independent of any other provisions in this Agreement and/or any other agreement between the Company and me; and the existence of any claim or action by me against the Company, whether predicated on this Agreement or otherwise, shall not constitute a defense to the enforcement of this Agreement by the Company.

4. A violation of these covenants will cause irreparable damage to the Company, the exact amount of which will be impossible to determine and, for that reason, I further agree that, in the event of such violation, the Company shall be entitled to injunctive relief, in addition to such other remedies as the Company may have.

5. Nothing herein shall be construed as constituting employment for a stated term because I understand that my employment is at will by the Company.

6. The covenants set forth in paragraphs 1 and 2 are absolutely necessary for the protection of the Company's legitimate proprietary and business interests.

7. If any court shall determine any covenant set forth herein is unenforceable, then:

(a) such covenant shall not be terminated, but shall be deemed amended by substituting in its place and stead such restrictions as the court may deem reasonable under the circumstances; and

(b) all other provisions of this Agreement shall survive such determination.

8. This Agreement shall inure to the benefit of the Company's successors or assigns.

| | | |
|---|---|---|
| [signature] | [signature] | March 21, 1997 |
| Witness | Employee's Signature | Date |

| | |
|---|---|
| Atlanta | |
| Branch Location | Branch No. |

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